

REMARKS

I. INTRODUCTION

Claims 1 and 8 have been amended. No new matter has been added. Claims 6 and 11 have been canceled. Thus, claims 1-5 and 7-10 are pending in the present application. In view of the above amendments and the following remarks, it is respectfully submitted that all of the pending claims are in condition for allowance.

The amended claims have merely incorporated the subject matter of a dependent claim and no additional language has been added to the claims. Thus, the amendments should be entered because they are merely recitations that have been previously considered and searched by Examiner.

II. CLAIM REJECTIONS – 35 U.S.C. § 112

Claims 1-10 stand rejected under 35 U.S.C. § 112, second paragraph, as indefinite for failing to particularly point out and distinctly claim the subject matter of the invention. (*See* 2/6/2008 Office Action, pp. 3-4.)

The Examiner asserted that the term “substantially,” as used in claims 1 and 8, is a relative term that renders the claim indefinite. (*See id.*, p. 3-4). MPEP 2173.05(b) states:

“The fact that claim language, including terms of degree, may not be precise, does not automatically render the claim indefinite under 35 U.S.C. 112, second paragraph.

Acceptability of the claim language depends on whether one of ordinary skill in the art would understand what is claimed, in light of the specification. When a term of degree is presented in a claim, first a determination is to be made as to whether the specification provides some standard for measuring that degree. If it does not, a determination is made as to whether one of ordinary skill in the art, in view of the prior art and the status of the art, would be nevertheless reasonably apprised of the scope of the invention.”

"The term "substantially" is often used in conjunction with another term to describe a particular characteristic of the claimed invention. It is a broad term. *In re Nehrenberg*, 280 F.2d 161, 126 USPQ 383 (CCPA 1960). The court held that the limitation "to substantially increase the efficiency of the compound as a copper extractant" was definite in view of the general guidelines contained in the specification. *In re Mattison*, 509 F.2d 563, 184 USPQ 484 (CCPA 1975). The court held that the limitation "which produces substantially equal E and H plane illumination patterns" was definite because one of ordinary skill in the art would know what was meant by "substantially equal." *Andrew Corp. v. Gabriel Electronics*, 847 F.2d 819, 6 USPQ2d 2010 (Fed. Cir. 1988)."

Applicants respectfully submit that one of ordinary skill in the art would understand the meaning of the term "substantially" as used in the above claims. For example, with regards to the recitation of "substantially empty" contained in claims 1 and 8, one of ordinary skill in the art would understand that a buffer capable of holding gigabytes of data would be considered "substantially empty" if it were emptied except for an insignificant amount of data. One of ordinary skill in the art would understand the term "substantially empty" to be definite because it is not always possible to remove every byte of data from the buffer causing it to be completely empty. However, the buffer would be "empty" for the purposes of the intended operation even if this insignificant amount of data remained in the buffer.

Similarly, regarding the recitation of "substantially equal" amounts of data found in claim 1, one of ordinary skill in the art would understand that when working with data that is measured in millions or billions of bytes, it is not always required that an exact match of numbers needs to be satisfied for something to be equal (e.g., an exemplary buffer storing one billion bytes of data contains a "substantially equal" amount of data to a buffer storing one billion and three bytes). Accordingly, Applicants respectfully submit that the claims are sufficiently defined and that the rejection on this rationale should be withdrawn.

III. CLAIM REJECTIONS – 35 U.S.C. § 103(a)

Claims 1-10 stand rejected under 35 U.S.C. § 103(a) as unpatentable over U.S. Patent 7,170,856 to Ho et al. (hereinafter “Ho”) in view of U.S. Pat. Pub. 2003/0053416 to Ribas-Corbera et al. (hereinafter “Ribas”). (*See* 2/6/2008 Office Action, pp. 4-7.)

Ho describes a jitter buffer that receives a plurality of data packets comprising a circuit emulation service over internet protocol (hereinafter “CESIP”). (*See* Ho, Abstract.) The buffer buffers the plurality of data packets and plays data from the plurality of data packets at a constant bit rate corresponding to the CESIP. (*See id.*)

Ribas describes a method and system including an improved generalized reference decoder that operates according to a number of sets of rate and buffer parameters for a given bit stream. (*See* Ribas, Abstract.) Each set characterizes a leaky bucket model and contains three parameters representing the transmission bit rate, buffer size, and initial decoder buffer fullness. (*See id.*) An encoder provides at least two sets of these parameters, whereby the decoder selects one or interpolates between them to operate at any desired peak bit rate, buffer size or delay. (*See id.*) The generalized reference decoder may select the smallest buffer size and corresponding delay that decodes the bit stream without buffer underflow or overflow, or alternatively may select and operate at the minimum required peak transmission rate, or something between both. (*See id.*) In practice, the buffer size, delay and/or the peak transmission rate can be reduced by significant factors, and/or the signal-to-noise ratio can be increased. (*See id.*)

Claim 1 has been amended to recite “[a] method of changing an output rate of information for a buffer (3) with a constant first output rate (R1), where the buffer (3) receives output data (2b) from a data source (2a), and the output data (2b) is added to be stored in said buffer (3), characterized in that the method comprises the steps of: *halting the reception of output data from the data source, the halting including discarding an input data by said data source;*

outputting the stored output data of said buffer at said first output rate (R1) until said buffer is empty; stopping outputting of the content of said buffer; resuming receiving and storing of said output data from the data source in said buffer when the buffer is substantially empty; setting a second constant output rate (R2) as the output rate of said buffer; and commencing output of the stored content of said buffer at said second output rate (R2), when the amount of buffered data is substantially equal to the second constant output rate (R2) times a requested buffer-time (TB2)."

In addressing the highlighted language when recited in claim 6, the Examiner asserts that the recitation discarding an input data by said data source, is taught by Ho "[in] block 1145, if the high threshold is exceeded, the jitter buffer is flushed to start fresh with new packets. In alternate embodiments, only part of the jitter buffer is flushed. In either case, enough data is flushed so that the receiving end ..." (See 2/6/2008 Office Action, pp. 6.) Applicants respectfully disagree. The jitter buffer is a buffer that "receives a plurality of data packets comprising a circuit emulation service over internet protocol ... buffers the plurality of data packets, and plays data from the plurality of data packets at a constant bit rate corresponding to the CESIP." (See Ho Abstract). The jitter buffer accumulates bit stream data, data packets, until a low water mark 610 is reached before transmitting output stream 630. (See Ho col. 8, lines 45-47, fig. 6). Ho does teach, "if the high threshold is exceeded, the jitter buffer is flushed." (See Ho, col. 11, ll. 64-66). However, Applicants respectfully submit that this is not equivalent to "halting the reception of output data from the data source, the halting including discarding an input data by said data source." Ho merely teaches that the jitter buffer will flush enough data so that the receiving end of the circuit can catch up with the sending end of the circuit. (See Ho, col. 11, l. 64 – col. 12, l. 1).

Furthermore, the Examiner appears to equate the transmitting *output stream* from the jitter buffer being flushed to "discarding an *input data* by said data source," as recited in claim 1. Applicant respectfully disagrees. In contrast, the "*input data*," as recited in claim 1, is not equivalent to data that has already passed through the buffer and is being output. Thus, Ho does

not teach or suggest the step of “halting the reception of output data from the data source, the halting including discarding an input data by said data source,” recited in claim 1. Ribas does not cure the deficiencies of Ho.

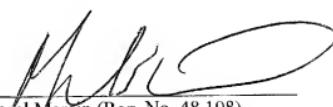
Therefore, Ho and Ribas, alone or in combination, neither disclose nor suggest “halting the reception of output data from the data source, the halting including discarding an input data by said data source,” as recited in claim 1. Accordingly, this rejection should be withdrawn. Because claims 2-5 and 7 depend from, and, therefore, include all of the limitations of claim 1, it is respectfully submitted that these claims are also allowable for at least the reasons stated above.

Claim 8 has been amended to recite “[a] A computer readable storage medium including a set of instructions operable by a processor, the instructions operable to: receive output data from a data source into a buffer having a constant first output rate (R1); add and store said output data in said buffer; stop the reception of output data from the data source; *discarding an input data by said data source*; output the stored content of said buffer at said first output rate (R1) until said buffer is empty; stop outputting of the content of said buffer; resume receiving and adding/storing output data from the data source (2a) when the buffer (3) is substantially empty; set a second constant output rate (R2) as the output rate of said buffer; and commence output of the stored content of said buffer at said second output rate (R2), when the amount of buffered data is equal to the second constant output rate (R2) times a requested buffer time (TB2).” For the reasons discussed above with reference to claim 1, Applicants respectfully submit that Ho and Ribas, alone or in combination, neither disclose nor suggest “discarding an input data by said data source” as recited in claim 8. Accordingly, this rejection should be withdrawn. Because claims 9 and 10 depend from, and, therefore, include all of the limitations of claim 8, it is respectfully submitted that these claims are also allowable for at least the reasons stated above.

CONCLUSION

It is therefore respectfully submitted that all of the presently pending claims are allowable. All issues raised by the Examiner having been addressed, an early and favorable action on the merits is earnestly solicited.

Respectfully submitted,

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